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TMOH11047

January 28, 2011
Email / Mail

Hon. Matthew P. McHale and Borough Council
Borough of Dumont
50 Washington Ave
Dumont, NJ 07628

Attention: John P. Perkins, Borough Administrator

Re: Dumont DPW Remedial Investigation and Workplan Preparation

Dear Mayor McHale and Members of the Borough Council:

As indicated in our proposal dated October 25, 2010, T&M is providing this report and scope of services proposal to continue the remedial investigation of the Public Works Garage addressed in NJ Department of Environmental Protection correspondence dated September 29, 2010.

As you know, we have moved forward with elements of the site investigation at the Borough's request, including indoor air evaluation at the DPW garage, prepared public notice signage and documents, performing a well inspection, and coordination of document review with the Borough solicitor.

Due to the lapse in time since work was suspended (administratively circa 1999, field investigation circa 1995), the prior Memorandum of Agreement with the NJDEP has been rescinded, and the project is now subject to the Site Remediation Reform Act (SRRA). SRRA created the Licensed Site Remediation Professional (LSRP) program, permitting the Borough to retain a LSRP to oversee and certify future investigation and remediation activities without waiting for NJDEP approvals. SRRA also establishes an affirmative obligation to remediate, within mandatory and regulatory timeframes.

While we will endeavor to utilize prior efforts in bringing the remedial investigation to a conclusion, data gaps, changes to regulatory standards, resolution of NJDEP identified deficiencies, and the potential for degradation of contaminants will require revisiting portions of the earlier site investigations.

Our Scope of Services for the next phases of the investigation follows:

1.0 Preliminary Assessment

SRRA requires that a Preliminary Assessment (PA) be performed at sites undergoing remediation of contamination resulting from non-Underground Storage Tank (UST) related sources. Since the DPW garage site has multiple areas of environmental concern, including non-UST related concerns, it meets this criterion. The PA will catalog prior property owners, site usage, past investigations, storage and use of hazardous materials on site, and adjacent properties that may affect the subject property. Although a portion of this effort was completed during the prior investigations, the PA must be

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updated and presented in an acceptable format. We note that some of the requisite documents have been assembled by the Borough Solicitor, and could be used to fulfill this requirement. We assume that these materials will be made available for our review.

We note that a site plan of the DPW garage in a usable format does not appear to be available. We propose to use scaled, oriented aerial photography to develop a base map suitable for use for the investigation.

1.1 Public Notice

SRRA requires public notice signage identifying the site contacts and case number be posted a minimum of 2 weeks prior to conducting remedial activities. This task has been completed with the assistance of the Dumont Public Works Department.

2.0 Site Investigation - Supplemental Soil and Ground Water Sampling

1995 and 1999 NJDEP correspondence indicate that required post excavation sampling was not completed after underground storage tank closures/removals. To satisfy this requirement and collect supplemental information regarding soil and ground water contamination, T&M will mobilize a Geoprobe direct push hydraulic sampling rig to the site. Soil cores will be advanced around the perimeters and through the bottoms of the former tank excavation areas, and examined for evidence of soil contamination.

The NJ One-Call utility mark-out service will be contacted prior to sampling to locate and mark utilities within public rights-of-way. Accurately locating tank excavations, abandoned tanks, and utilities outside of public rights-of-way will require a geophysical survey. A geophysical survey is non-invasive, and uses electromagnetic methods to identify subsurface anomalies, such as tanks, piping, and voids.

Soil samples in the vicinity of UST 1 (Aladdin Ave parcel) will be analyzed for volatile organics plus library search (VO+TICs), semi-volatile organics (SVO+TICs), PCBs and target analyte metals (TAL metals). Soil samples in the vicinity of UST 4 ("shed") will be analyzed for VO+TICs and lead. Samples at the locations of USTs 2 (gasoline) and 3 (diesel) will be analyzed for VO+TICs, naphthalene and methyl-naphthalene, and lead. Three samples will be collected at the location of the previously abandoned waste oil tank at the DPW garage. One sample will be collected through the excavation of the removed waste oil tank at the rear of the DPW garage. These samples will be analyzed for total petroleum hydrocarbons (TPH) and the sample with the highest TPH at each location further analyzed for VO+10, semi-volatile organics (SVO+TICs), polychlorinated biphenyls (PCBs), and target analyte metals (TAL metals).

As part of this effort, T&M will also install temporary well points within areas previously identified as impacted by free product. Ground water will be sampled for VO+TICs.

Global positioning survey equipment (GPS) will be used to locate sample locations and plot them on a base map.



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3.0 Re-establish Monitoring Well Network, Sample Wells.

On December 8, 2010, T&M personnel visited the DPW garage to inspect the monitoring well network for condition and function. Of the 23 wells identified in the 1999 report, only 9 were accessible, with 8 of the 9 still usable. The remaining 14 well locations were either paved over, beneath athletic fields, or under stockpiles. Due to the costs associated with re-installing wells, T&M will attempt to recover the wells using field survey, and attempt to pinpoint well locations using a metal detector. Wells will be re-excavated, repaired and redeveloped if possible. If a well is located and cannot be rehabilitated, it must be properly abandoned. If the wells cannot be relocated or rehabilitated, replacement wells will be installed, with adjustments to location based on the results of Task 2.0, above. Our cost estimate uses the conservative assumption that all wells not found during our December 8 inspection must be abandoned, and replacement wells installed. We have also included costs to install wells in each of the former tank excavations as required in the NJDEP deficiency letter of 1995. Wells will be installed by hollow stem auger methods, and be constructed of 2" diameter flush joint threaded PVC casing and screen. Drill cuttings and fluids will be contained in 55 gallon DOT approved drums, and staged on the DPW property until disposal at a licensed facility is arranged. Wells will be fitted with flush mount covers and bolt-down lids. Wells will be located by field survey with respect to established horizontal and vertical benchmarks, and plotted on a base map. Monitoring well construction certification forms (Form A) will be prepared for each new well. Location certification forms (Form B) will be prepared for all wells. Two rounds of ground water samples will be collected from the monitoring well network, and analyzed for SVO+TICs, VO+TICs, and lead. Upstream and downstream samples will be collected from Hirschfield Brook, and analyzed for SVO+TICs, VO+TICs, and lead.

4.0 Receptor Evaluation

SRRA requires that property owners and land use within 200' of the site, and wells within 1 mile of the site be identified and mapped. A baseline ecological evaluation must be included with the receptor evaluation. The receptor evaluation must be submitted within 1 year of project initiation (due October 1, 2011).

5.0 Reporting

Upon conclusion of the above activities, a Preliminary Assessment\Site Investigation Report and Remedial Investigation Workplan (RIW) will be prepared presenting the findings of the soil and ground water investigation, and outlining any additional steps necessary to further delineate contamination at the site, or address potential off-site receptor issues.

The PA\SI and RIW must be submitted within 1 year of project initiation (due October 1, 2011), unless an extension is granted.



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6.0 Meetings and Project Management

We have included time to attend up to three meetings with the Borough and an allowance for project management and QA/QC review by senior staff.

Fees

T&M

Our estimated fee (broken down by task) follows. Please note that NJDEP requires an annual remediation fee, due upon submission of the report. The estimated NJDEP fee for current site conditions is anticipated to be \$2,300.00 per year.

1.0	Site Plan Preparation, Preliminary Assessment	\$ 7,500.00
2.0	Site Investigation	\$ 8,000.00
3.0	Repair/install monitoring well network	\$24,000.00
4.0	Receptor Evaluation	\$ 2,000.00
5.0	Data analysis, reporting, LSRP submissions	\$20,000.00
6.0	Meetings, PM, QA/QC	\$ 7,700.00
Subtotal T&M		\$69,200.00

NJDEP

Remediation fees per year (estimated).	\$ 2,300.00
Well search fee	230.00

Subconsultant Services (By Task)

1.0	Chain of Title (by title company)	TBD
2.1	Geophysical services	\$ 4,025.00
2.2	Drilling Services	\$ 6,700.00
2.3	Laboratory Services	\$ 13,800.00
3.0	Drilling services	\$ 38,575.00
3.1	Laboratory services	\$ 38,700.00

Subconsultant services \$ 101,800.00

Total	\$ 173,530.00
Contingency Allowance(9%)	\$ 16,470.00
Total	\$ 190,000.00

5.0 Out of Scope Activities

SRRA establishes expedited investigation and reporting time frames for certain exposure triggers, such as potential vapor intrusion in sensitive receptors, free product



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contamination, or contamination of potable water wells under the category of "Immediate Environmental Concerns". Should any of these triggers occur during the investigation, we will notify the Borough as soon as possible regarding its obligations to investigate and remediate IECs.

Once the above activities are completed, the scope and cost of potential remedial options can be estimated. Ideally, remediation would involve institutional controls and engineering controls such as a deed notice for contaminated soil, and a Classification Exception Area (CEA) for ground water.

T&M appreciates the opportunity to assist the Borough in resolving this issue. Should you have any questions concerning our proposal, please do not hesitate to contact us.

Very truly yours,
T&M ASSOCIATES

DOMINIC B. CARRINO, P.E.
BOROUGH ENGINEER

WILLIAM H. MATULEWICZ, LSRP
HYDROGEOLOGIST

DBC:klm

Cc: Mayor McHale
Gregg Paster, Borough Attorney
Sue Connelly, Borough Clerk
Terrie Giotis, CFO
William Matulewicz, LSRP